1. Separate induction shocks directly of the medulla oblongata or the spinal cord below it has no action upon the blood-pressure, or at least very little, even when currents are used whose single break has a tetanizing effect.
2. When at least two to three irritations in a second, if moderately strong currents were used, then there is an action through the summation of irritations.
3. These seldom irritations have an effect when their intensity is increased, but the vaso-motor action through increase of intensity of the current never attains to such a height, as through irritation with moderately strong currents of greater frequence.
4. When the intensity of the irritating current is constant, and the frequency of its breaks is increased, then the effect of the irritation on the vaso-motor increases. This effect does not increase after the frequency of the shocks has reached twenty to thirty in a second.
5. The maximum of blood-pressure by different animals, as dogs and rabbits of the same species and size, is of very different amount, and this maximum is obtained through strong irritations of moderate frequency (about ten to twelve breaks per second), and also through the moderately strong irritations of maximal frequency (twenty to twenty-five in a second).
6. The maximum of the blood-pressure was less when, later, even stronger irritations were reached, than when frequent weaker irritations were used.
7. After the irritation of the vaso-motor centre is ended, the blood-pressure gradually sinks.—*DuBois' Arch.*, 1883, Erster Heft.

THE ACT OF DEGLUTITION.—I. Steiner has been performing experiments upon the centre of deglutition, and the respiratory centre in rabbits, cats, and dogs. His conclusions are as follows: Every act of deglutition which ensues upon irritation of the superior laryngeus is connected with a respiratory movement. He believes that the two centres of deglutition and respiration are connected with each other by a so-called intra-central nerve-fibre.—*DuBois' Arch.*, 1883, Erster Heft.

EFFECT OF ANÆMIA ON THE ELECTRIC IRRITABILITY OF THE BRAIN.—Munk and Orschansky have experimented upon this subject: Losses of blood equal to $\frac{1}{7}$ of the whole quantity are without effect. About $\frac{1}{5}$ of the whole blood when lost increases the irritability, whilst greater losses of blood decrease the irritability. Gradual loss of blood affects the irritability less than rapid. Between the changes of blood-pressure and the irritability of the brain there is no parallel.—*DuBois' Arch.*, 1883, Erster Heft.

PATH OF FIBRES IN THE SPINAL CORD.—Dr. Wasil Kusmin has made a number of experiments as to the path of the fibres in the spinal cord of the dog, and gives the following summary of his results, confirming in the main the results obtained by Woroschiloff, Ott, and R. M. Smith, with the same methods of study: 1. The lateral columns contain the sensory and motor fibres. 2. The anterior columns consist mainly of centrifugal fibres which, after destruction of the lateral columns, are capable of assuming their functions to a certain extent. 3. The posterior columns are largely formed of centripetal fibres. 4. The gray substance contains no continuous path of conduction. 5. The sensory fibres from the lower extremities decussate in the cord. 6. After a hemisection of the spinal cord, the motor nerves of the lower extremities preserve their functions as high as the anterior roots of the nerves on the level of the section on the opposite side of the cord. 7. Vaso-constrictor fibres run only in the lateral columns.—*Am. Med. Jour. Med. Sci.*, Jan. 1883. *Medicinische Jahrbücher*, 1882, 11 Heft. ISAAC OTT, M.D.

b.—GENERAL PATHOLOGY OF THE NERVOUS SYSTEM.

DEAFNESS IN HYSTERICAL HEMIANÆSTHESIA.—Dr. G. L. Walton, of Boston, gives (*Brain*, Jan., 1883) the result of his examination of the hearing of thirteen patients affected with hemianæsthesia, in Salpêtrière, made at Professor Charcot's suggestion. Referring to the fact that in the hemianæstheia of hysteria insensibility involves not only the skin and mucous membranes, but usually extends to sight, smell, taste, and hearing on the same side, the writer quotes Féré in his remarks on the involvement of the special senses, and also cites Jolly, Uspenski, Gellé, and Urbantschitsch, in reference to hysterical deafness. He divides his patients into three classes: those with *complete* anæsthesia on one side, the other side remaining intact; those with *incomplete* anæsthesia on one side, the other remaining intact; and those with anæsthesia more or less complete on both sides. In the *first class*, as in all, the anæsthesia extends to the deep part of the ear; and being complete in this class the tympanum may be touched without any acknowledgment of sensation, and without the least reflex movement. In such a case the patient will be unable to tell with the eyes closed whether there is an instrument in the ear or not. Touching the deep parts of the opposite ear in these patients produces the usual disagreeable sensation and reflex movement, generally indeed exaggerated. That the anæsthesia extends to the middle ear is seen by the fact that insufflation by the Politzer air douche produces no sensation in the ear of the affected side. This is a fact to be borne in mind in the examination of these cases, for if the patient's sensations were relied on, the Eustachian tube might be supposed impermeable. In this class of patients neither the watch, the voice, nor the tuning-fork are heard by the affected ear, and no tuning-fork is heard on this side when vibrating against the skull.